

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: **Hittinger et al.**

Examiner: Not yet known

Application No.: **10/773,806**

Art Unit: 1625

Filed: **February 6, 2004**

Title: **CHEMICAL DERIVATIVES AS ANTITELOMERASE AGENTS WHICH BIND SPECIFICALLY TO THE G-QUADRUPLEX DNA STRUCTURES AND THEIR APPLICATION AS A SPECIFIC ANTICANCER AGENT**

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. 1.56, 1.97 AND 1.98**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Applicants submit herewith patents, publications, and other information of which they are aware, which they believe may be material, as defined in 37 C.F.R. 1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 C.F.R. 1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 C.F.R. 1.97(h), constitute an admission that any patent, publication or other information referred to is, or is considered to be, material to the patentability of this invention. Pursuant to 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists.

A concise explanation of the relevance of some or all of the items listed on the attached PTO-1449 (modified) is as follows:

Listed reference DE 198 12 879 A1 is in the German language. Canadian publication No. 2 325 489 is an English language family member of DE 198 12 879 A1, and is believed to have substantially similar content as DE 198 12 879 A1.

Listed references DE 199 35 219 A1 and WO01/07020 are in the German language. U.S. Patent No. 6,362,210 B1 is an English language family member of DE 199 35 219 A1 and WO01/07020, and is believed to have substantially similar content as DE 199 35 219 A1 and WO01/07020.

Listed reference JP 11-60573, Masayuki et al., is in the Japanese language. An English language abstract of JP 11-60573 is provided herewith.

Listed reference JP 53-47439, Shizuo et al., is in the Japanese language. An English language abstract of JP 53-47439 is provided herewith.

Listed reference JP 6-49062, Katsutoshi et al., is in the Japanese language. An English language abstract of JP 6-49062 is provided herewith.

Listed reference Kreutzberger et al. is in the German language. An English language abstract of Kreutzberger et al. is provided herewith.

This Information Disclosure Statement is filed within the period set forth in §1.97(b) because it accompanies the new patent application submitted herewith, is filed within three months of the filing date of a national application or within three months of the date of entry of the national stage as set forth in §1.491 in an international application, or is believed to be filed before the mailing date of a first Office Action on the merits, whichever event occurs last. However, in the event that the first office action has been mailed, the Commissioner is authorized to charge any fees under 37 C.F.R. 1.17(p) or any additional fees required by this paper or credit any overpayment to Account No. **18-1982**.

Respectfully submitted,

June 25, 2007  
Date

Kelly Bender  
Kelly L. Bender, Reg. No. 52,610  
Attorney for Applicant

Sanofi-aventis  
Patent Department  
Route #202-206 / P.O. Box 6800  
Bridgewater, NJ 08807-0800  
Telephone (610) 889-8995  
Telefax (908) 231-2626  
Sanofi-Aventis Docket No. FRAV2003/0004 US NP

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Substitute for form 1449A/PTO				<b><i>Complete if Known</i></b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Application Number</b>	10/773,806
				<b>Filing Date</b>	02-06-2004
				<b>First Named Inventor</b>	HITTINGER
				<b>Group Art Unit</b>	1625
				<b>Examiner Name</b>	Not Yet Known
Sheet	1	of	4	Attorney Docket Number	FRAV2003/0004 - US - NP

**U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		CA	2 325 489		LEHR et al	09-30-1999		
		DE	198 12 879 A1		KIRSTEN et al	09-30-1999		
		DE	199 35 219 A1		HAUEL et al	02-01-2001		
		JP	11-60573		MASAYUKI et al	03-02-1999		
		JP	53-47439		SHIZUO et al	04-27-1978		
		JP	6-49062		KATSUTOSHI et al	02-22-1994		
		WO	01/07020 A2		HAUEL et al	02-01-2001		
		WO	01/19825 A1		DENNY et al	03-22-2001		
		WO	01/47897 A1		MORIARTY et al	07-05-2001		
		WO	93/20056		JARMAN et al	10-14-1993		

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Sheet	2	of	4	Attorney Docket Number	FRAV2003/0004 - US - NP

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First Named Inventor	HITTINGER
Group Art Unit	1625
Examiner Name	Not Yet Known

Attorney Docket Number FRAV2003/0004 - US - NP

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BRATTAIN et al, Heterogeneity of Human Colon Carcinoma, Abstract of Cancer Metastasis Rev. 1984; 3(3):177-91	
		BURTON et al, Design of Novel Affinity Adsorbents for the Purification of trypsin-like Proteases, Abstract of J. Mol. Recognit. 1992, 5(2), pp. 55-68	
		CHEN et al, Spectroscopic Recognition of Guanine Dimeric Hairpin Quadruplexes by a Carbocyanine Dye, Proc. Natl. Acad. Sci. USA, Vol. 93, pp.2635-2639, April 1996	
		GILL, Surra. 3. Activity of Certain Derivatives of Acridine, Sulfonated Naphthylamine, aminoquininaldine, styryl-quinoline, and Nitrofurazone Against Trypanosoma evansi in Rats, Abstract of Indian J. Anim. Sci., 1971, 41(6), pp. 503-9	
		HIRATANI et al, 2,6-Bis[N-(8-quinolyl)carbamoyl]pyridine as a Highly Selective Extractant for Cu(II), Bulletin of The Chemical Society of Japan, 1990, 63, pp. 3331-3333	
		KATSUTOSHI et al, Pyrimidinylamino-or Triazinylaminoquinoline Derivative and Its Production and Agricultural and Horticultural Germicide Containing the Same as Active Ingredient, Patent Abstracts of Japan, Publication No. 06049062 A, Publication Date Feb. 22, 1994	
		KREUTZBERGER et al, Synthesis And Spectroscopic Analyses Of Dianilinotriazines, English Language Abstract of Chemiker-Zeitung (1990, pp.208-210, volume 114)	
		KREUTZBERGER, ET AL, Synthesis And Spectroscopic Analyses Of Dianilinotriazines, Chemiker-Zeitung (1990, pp.208-210, volume 114)	
		MASAYUKI et al, Triazine Derivative and Telomerase Inhibitor, English Language Abstract of JP11-60573	
		MOKBEL et al, Telomerase and Breast Cancer: From Diagnosis to Therapy, Abstract of Int. J. Sug. Investig. 2000, 2(1), pp. 85-88	

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<b>OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS</b>					
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		PANDYA et al, Studies on Potential Drugs : Potential Anthelmintics Part I, J. Inst. Chemists (India), Vol. XLVII, November 1975 pp. 235-237			
		SHIZUO et al, Coloring of High Molecular Weight Material, English Language Abstract of JP 53-47439			
		SUN et al, Inhibition of Human Telomerase by a G-Quadruplex-Interactive Compound, J. Med. Chem., 1997, 40, pp. 2113-2116			
		SWELLAM et al, Emerging role of p53, bcl-2 and Telomerase Activity in Egyptian Breast Cancer Patients, Abstract of IUBMB Life, 2004, 56(8), 483-490			
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		WHITTEN et al, Rapid Microscale Synthesis, a New method for Lead Optimization Using Robotics and Solution Phase Chemistry: Application to the Synthesis and Optimization of Corticotropin-Releasing Factor1 Receptor Antagonists, J. Med. Chem., 1996, 39, pp. 4354-4357			
		Cecil Textbook of Medicine, edited by Bennet, J.C., and Plum F., 20th edition, Volume 1, 1004-1010, 1996			

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